## Application No. Applicant(s) 10/714 791 WILLMANN ET AL. Notice of Allowability Examiner Art Unit Mary K. Zeman 1631 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment of 12/18/08. The allowed claim(s) is/are 1,5 and 7-9. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date 1/13/08. 3. Information Disclosure Statements (PTO/SB/08), 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Mary K Zeman/ Primary Examiner

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## EXAMINER'S AMENDMENT

The Amendment filed 12/18/08 has been entered,

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with C. Hildebrand on 1/13/09.

The application has been amended as follows:

Claim 1. (Currently amended) A computer system for calculating a pharmacokinetic behavior of a chemical substance in an insect based on at least one physicochemical property of said chemical substance, the computer system [,] comprising:

a physiologically based pharmacokinetic simulation model of said insect for predicting pharmacokinetic behaviors, comprising predicting concentration/time profiles of the chemical substance, the physiological based pharmacokinetic simulation model being represented by a system of coupled differential equations, the differential equations describing the mass transport, the distribution, the metabolism and the excretion of chemical substances in said insect on the basis of the following substance-dependent parameters:

rate coefficients for mass transport between the organs of said insect, organ/haemolymph distribution coefficients, metabolism rate coefficients, and excretion rate coefficients:

a database containing physicochemical properties and experimentally determined substance-dependent parameters of [test] <a href="chemical">chemical</a> substances <a href="and further containing">and further containing</a> relationships, concentration/time profiles and coefficients required for the pharmacokinetic simulation model:

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a prediction module for calculating the substance- dependent parameters of the chemical substance to be studied, which are required by the physiological based pharmacokinetic simulation model, from at least one physicochemical property of the substance by means of the [relations] relationships stored in said database;

an input/output module for the input of at least one [the] physicochemical property of a chemical substance to be studied;

and for the output of <u>a calculated pharmacokinetic behavior of a chemical substance in an insect</u>, comprising a simulated concentration/time profile[s] of the chemical substance [for]  $\underline{to}$  a user of said computer system.

Claim 7, line 2 the word "test" has been deleted, and the word --chemical-- has been inserted in its place.

The following is an examiner's statement of reasons for allowance: The computer system of the claims provides a novel and unobvious system for predicting pharmacokinetics of chemicals in an insect model. The system comprises specific components and physical elements. The art of record does not teach or render obvious this system as it does not provide the particular pharmacokinetic equations required for the insect model, nor how to use said model in a predictive system.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary K Zeman whose telephone number is (571) 272 0723

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjie Moran can be reached on (571) 272 0720. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. /Mary K Zeman/ Primary Examiner, Art Unit 1631